

**CITGO Petroleum Corporation**

135th Street & New Avenue
Lemont, IL 60439-3659

Transmitted via e-mail

July 5, 2017

EPA (Headquarters), c/o
Eastern Research Group, Inc.
14555 Avion Parkway, Suite 200
Chantilly, VA 20151
refinerycd@erg.com

Submission of CEMS Operation and Maintenance Plan

To whom it may concern:

Pursuant to paragraph 29 of the 2017 Consent Decree, please find attached a copy of the Lemont Refinery CEMS Operation and Maintenance Plan.

The following table has been included in this letter detailing the sections of the Plan that meet the requirements of the CD paragraphs for your reference.

2017 CD Paragraph Number	Requirement	Applicable Sections of CEMS Plan
29	By no later than 180 days after the Date of Entry of this Consent Decree, CITGO shall develop and submit to EPA for review a comprehensive CEMS Operation and Maintenance Plan ("CEMS O&M Plan") and a comprehensive PEMS Monitoring Protocol (as identified in Appendix E) that is designed to enhance the performance of the CEMS and the PEMS, improve CEMS and PEMS accuracy and stability, and minimize periods of CEMS and PEMS downtime.	NA

30	At least once every 12-month period that commences 90 days after CITGO's submission of the CEMS O&M Plan and the PEMS Monitoring Protocol, CITGO shall provide training to all individuals (CITGO employees and contractors) involved in CEMS and/or PEMS operations and maintenance in order to ensure and maintain necessary levels of competence in maintaining and operating CEMS and/or PEMS. All newly-hired individuals (CITGO employees and contractors) involved in CEMS and/or PEMS operations and maintenance shall receive CEMS and/or PEMS training, as applicable, which shall include a review of the CEMS O&M Plan and/or the PEMS Monitoring Protocol, prior to undertaking any CEMS-related and/or PEMS-related responsibilities. All individuals involved in CEMS and/or PEMS operations and maintenance shall have access to and be familiar with the CEMS O&M Plan and/or PEMS Monitoring Protocol. These requirements shall be identified and described in the CEMS O&M Plan and the PEMS Monitoring Protocol.	Section 8.1.3
31	Commencing on the Date of Lodging for Existing CEMS and on the date required by this Consent Decree for CEMS that will be installed pursuant to this Consent Decree, CITGO shall certify, calibrate, maintain, and operate all CEMS in accordance with the provisions of 40 C.F.R. § 60.13 that are applicable to CEMS (excluding those provisions applicable only to Continuous Opacity Monitoring Systems) and 40 C.F.R. Part 60, Appendices A and F, and the applicable performance specification test of 40 C.F.R. Part 60, Appendix B.	Sections 8.1.1, 8.1.2 and 8.2
32	Commencing on the Date of Lodging for Existing CEMS and on the date required by this Consent Decree for CEMS that will be installed pursuant to this Consent Decree, CITGO shall operate each CEMS at all times, including during periods of process unit Startup, Shutdown, and/or Malfunction.	Section 3.0
33	If CITGO determines that it no longer needs to operate an Existing CEMS because an underlying legal requirement (e.g., this Consent Decree, a federal or state statute or regulation, or a permit) no longer requires the operation of the CEMS, then CITGO shall notify EPA, pursuant to Section XVII (Notices), that CITGO has modified the list of "Existing CEMS" set forth in Section IV (Definitions) to delete the CEMS that is the subject of the submission from the list. CITGO shall submit this notice within 60 days of the date that the operation of the CEMS no longer was required. In the Notice, CITGO shall identify the legal requirement that formerly required the CEMS' operation and the date that the legal requirement no longer was applicable.	Section 7.0

34 a	<p>The CEMS Routine Preventive Maintenance Program shall identify and require implementation of a regularly-scheduled set of activities designed to minimize problems that cause CEMS downtime. Such activities and procedures may be based initially on the CEMS vendor's recommendations. Routine preventive maintenance procedures shall include regular (<i>e.g.</i>, daily, weekly, monthly) internal (and, as needed, external) operation and maintenance ("O&M") checks designed to minimize CEMS downtime. Internal O&M checks include, but are not limited to, CEMS inspections, routine cleaning of components, and any other routine maintenance. External O&M checks include, but are not limited to, independent third party CEMS audits or other assessments to ensure continuous CEMS operation. For the CEMS, both internal and external O&M checks are in accordance with the actions already required by 40 C.F.R. Part 60, Appendix F.</p>	Section 8.3
34 b	<p>The CEMS QA/QC Program shall identify and require implementation of activities to assess and maintain the quality of continuous emissions monitoring data, including regular (<i>e.g.</i>, daily, weekly monthly) internal (and, as needed, external) QA/QC and operation checks designed to maintain or improve data quality. Internal QA/QC and operation checks include, but are not limited to, periodic calibrations, drift tests, relative accuracy tests, and any other sampling and analyses to assess the quality of CEMS data (<i>i.e.</i>, accuracy and precision). External QA/QC and operation checks include, but are not limited to, independent third party CEMS audits, third party sampling and analysis for accuracy and precision, or other assessments to ensure accurate CEMS operations. Both internal and external QA/QC and operation checks for CEMS are in accordance with the actions already required by 40 C.F.R. Part 60, Appendix F.</p>	Sections 8.3 and 8.4.1 Appendices 1-5
34 c	<p>The CEMS Repair Program shall identify and require the implementation of procedures designed to ensure the prompt repair of CEMS to address both routine and non-routine maintenance and repair. As part of its CEMS Repair Program, CITGO shall: (i) maintain a spare parts inventory adequate to support normal operating and preventive maintenance requirements; and (ii) establish written procedures for the acquisition of parts on an emergency basis (<i>e.g.</i>, vendor availability on a next-day basis). At all times during the pendency of this Consent Decree, CITGO shall ensure that a current employee of the Lemont Refinery has been designated with the responsibility for maintaining the adequacy of the spare parts inventory. The on-site spare parts inventory may be based initially on CEMS vendor recommendations.</p>	Sections 8.1.1, 8.1.2 and 8.3

34 d	No less than one time per 12-month period commencing in the 12-month period that is one year after the date that CITGO submits its CEMS O&M Plan and its PEMS Monitoring Protocol, CITGO shall review and update, as needed, its CEMS Routine Preventive Maintenance Programs, its CEMS QA/QC Program, its CEMS Repair Program, and/or its PEMS Monitoring Protocol to incorporate necessary or appropriate modifications based on operating experience with each CEMS and with the PEMS. CITGO also shall review and update, as needed, its CEMS Routine Preventive Maintenance Program, its CEMS QA/QC Program, its CEMS Repair Program, and/or its PEMS Monitoring Protocol based on the results of each CEMS and/or PEMS Downtime Root Cause Analysis and Corrective Action Report written pursuant to Paragraph 36 by no later than 135 days after the CEMS and/or PEMS Downtime Root Cause Analysis and Corrective Action Report is due.	Section 3.0
35	EPA may provide written comments on CITGO's CEMS O&M Plan and/or CITGO's PEMS Monitoring Protocol, or EPA may decline to comment. The procedures of this Paragraph shall apply.	NA
35 a	If EPA provides written comments within 60 days of receipt of CITGO's CEMS O&M Plan or its PEMS Monitoring Protocol, then within 45 days of receipt of such comments, CITGO shall either: (i) modify the Plan and/or Protocol consistent with EPA's written comments; or (ii) submit the matter for dispute resolution under Section XIII of this Consent Decree.	NA
35 b	If EPA does not provide written comments within 60 days of receipt of CITGO's CEMS O&M Plan or its PEMS Monitoring Protocol, EPA nonetheless may still provide written comments requiring changes to one or both of these documents. Within 60 days of receipt of such comments, CITGO shall either: (i) implement all of the actions required by the comments; or (ii) notify EPA that CITGO has determined that implementation of one or more of those actions (which CITGO shall specifically identify) would be either: (1) unduly burdensome to implement given the degree to which CITGO has proceeded with implementing the CEMS O&M Plan or the PEMS Monitoring Protocol, as applicable; or (2) would be otherwise unreasonable. If CITGO notifies EPA that it will not implement all of the actions required by the comments, then within 60 days of receipt of CITGO's notification, EPA may either accept CITGO's position or invoke dispute resolution pursuant to Section XIII of this Consent Decree.	NA
35 c	During the pendency of any dispute resolution proceeding pursuant to this Paragraph 35, CITGO shall implement all parts of the CEMS O&M Plan and/or PEMS Monitoring Protocol that are not the subject of the dispute and shall also implement the disputed parts consistent with CITGO's proposal. After completion of the dispute resolution proceeding, CITGO shall implement the disputed parts of the CEMS O&M Plan and/or PEMS Monitoring Protocol consistent with the results of the dispute resolution proceeding.	NA

36 a	At any time that, in two consecutive calendar quarters, a CEMS or the PEMS has downtime greater than 5% of the time in each such calendar quarter, CITGO shall conduct a CEMS Downtime Root Cause Analysis or a PEMS Downtime Root Cause Analysis, as applicable. For purposes of the 5% downtime calculation, “downtime” shall mean the period of time during the operation of the emission unit being monitored in which any of the required CEMS data or PEMS data either are not recorded or are invalid for any reason (<i>e.g.</i> , monitor malfunctions, data system failures, preventive maintenance, unknown causes, <i>etc.</i>), but shall not include downtime associated with routine CEMS zero and span checks and QA/QC activities required by this Consent Decree and/or an applicable regulation. CEMS and PEMS data that meet the requirements of 40 C.F.R. § 60.13 shall be considered “valid” for purposes of determining downtime.	Section 8.8
36 b	By no later than 45 days after an event that triggers a CEMS Downtime Root Cause Analysis or a PEMS Downtime Root Cause Analysis, CITGO shall prepare a CEMS Downtime Root Cause Analysis and Corrective Action Report and/or a PEMS Downtime Root Cause Analysis, as applicable,	Section 8.8
36 c	CITGO shall undertake as expeditiously as reasonably possible all reasonably available corrective actions that are necessary to correct the cause of the CEMS and/or PEMS downtime, as applicable, and to prevent a recurrence of the root and any contributing cause(s) identified in the CEMS and/or PEMS Downtime Root Cause Analysis and Corrective Action Report. In this Report, CITGO shall include a description of any corrective actions already completed or, for corrective actions that are not yet completed, a schedule for their implementation.	Section 8.8
36 d	For any specific CEMS and/or PEMS for which a CEMS and/or PEMS Downtime Root Cause Analysis and Corrective Action Report is required twice within twelve (12) consecutive calendar quarters, CITGO shall retain an independent third party to evaluate CITGO’s assessment of the CEMS and/or PEMS downtime cause(s). By no later than 120 days after CITGO’s required preparation of the second CEMS and/or PEMS Downtime Root Cause Analysis and Corrective Action Report, the independent third party shall prepare a written report (“CEMS Downtime Third Party Report” and/or “PEMS Downtime Third Party Report”) which may include recommendations for additional corrective actions and/or modifications to CITGO’s CEMS O&M Plan and/or to CITGO’s PEMS Monitoring Protocol. CITGO shall implement all recommended corrective action(s) or implement other actions that address the root cause and any contributing causes identified by the third party. CITGO shall document its basis for not implementing any elements of the third party’s recommended corrective action(s). Dispute resolution under Section XIII may be invoked for disputes arising under this Subparagraph.	Section 8.8

If there are questions or additional information required, please contact James Lant at (630) 257-4441 or me at (630) 257-4474.

Sincerely,



Michael G. Mee
Environmental Manager

JRL/PLM

Enclosure: CEMS Operation and Maintenance Plan

Copies (w/ Enc) per Section XVII, Paragraph 126:

EPA (Region 5)

Certified # 7015 1730 0000 2037 2554
USPS Tracking# 9590 9402 2270 6225 0614 43
Compliance Tracker (AE-17J)
Air Enforcement and Compliance Branch
U.S. EPA, Region 5
77 West Jackson Blvd
Chicago, IL 60604

E-mailed to: galinsky.virginia@epa.gov

E-mailed to: wagner.william@epa.gov

Cc/Enc:

James Tancredi Larry Darcey William Booth